How to run an Errordiary Workshop: Exploring errors and resilience strategies with patients, professionals and the public

Conference or Workshop Item

How to run an Errordiary Workshop: Exploring errors and resilience strategies with patients, professionals and the public

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Introduction

Errordiary is a public engagement initiative that aims to raise awareness and debate about error and resilience strategies. *Errordiary in healthcare* targeted patients, healthcare professionals and members of the public to see if it had potential for healthcare. To engage with these groups we ran a competition, surveys, focus groups and presentations. After a recent presentation about Errordiary one of the doctors that attended remarked, "I will be running a session on error and resilience strategies in my clinical practice, inspired by you!". However, at that stage, it was not clear to us how to run such a session. In this paper we present a format that could be adapted by others. This format was successful in getting people with diabetes, healthcare professionals and the public to talk about and share their own errors and resilience strategies in three separate focus groups.

Background

Errordiary is a novel public engagement website that collects funny, frustrating and fatal errors alongside examples of resilience strategies. These two strands respectively signify performance deviations and adaptive strategies to improve performance. The Errordiary website has three main parts: 1) an error stream where people post funny, frustrating and fatal errors; 2) a resilience stream where people post strategies for avoiding errors and reducing their impact; and 3) a Discovery Zone that contains engaging resources to entertain and educate readers about human error and resilience. Figure 1 shows a screenshot of the Errordiary website.

Broadly, intended learning from this initiative includes: a) that errors and performance deviations are frequent and part of normal performance; b) that resilience strategies can be developed to avoid error and improve performance; and c) that individuals should not always be blamed when things goes wrong. Examples on Errordiary can facilitate the juxtaposition of funny and more serious errors. The idea behind this is to bridge between the mundane and the alarming, and break down barriers between more common and rare events.

Errordiary in healthcare was an initiative to see if patients, healthcare professionals and the public would successfully engage with these ideas, and see value in this work. The initiative involved a three month competition to encourage people to post errors and resilience strategies to the website;

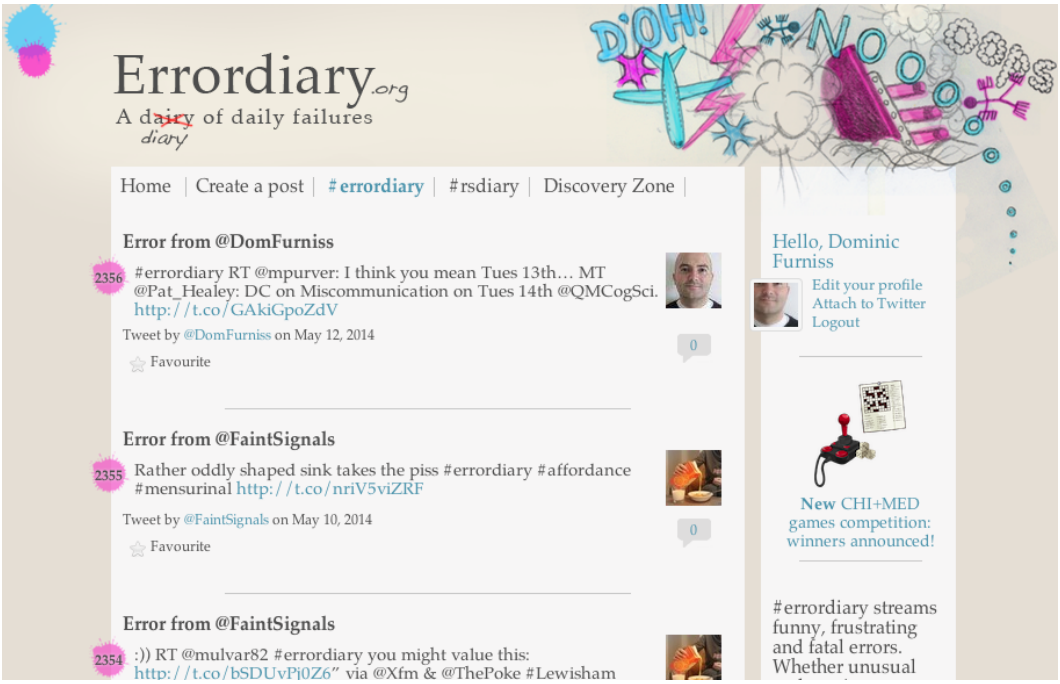

Figure 1: Screenshot of the Errordiary website

presenting to medics and people with diabetes; and running surveys and focus groups for engagement and evaluation.

Traffic to the site increased from about 2,000 unique visitors over the 100 days before the competition, to over 6,000 unique visitors during the 100 days of the competition. Before the competition 71% of survey participants stated that one of the reasons they use Errordiary is because they knew people within the project. After the competition this figure dropped to 47%. This suggests that the recent competition and the publicity around it was able to attract a wider audience. The survey also showed that people were engaging for reasons other than the competition, indicating the potential for project longevity. 85 new members joined the community during the competition. Errordiary is a broadening direct network, where information can be shared and people can participate in research.

We realised whilst running the competition that the website and associated competition acted as a vehicle for broader engagement. It provided a focal point, an excuse and further motivation to reach out to our target audiences. An early lesson was: just because we built the website did not mean that people would engage with it. To encourage engagement we had to reach out to different communities to promote the website and to engage with them about the ideas behind it more directly.

This was especially important for healthcare professionals who face a number of challenges to share error offline let alone online. In feedback to us they said to share them openly on Errordiary was too much to ask. This made more direct forms of engagement (e.g., presentations and focus groups) more important. Arguably, it is also within these active and direct forms of engagement that we have a chance for deeper influence, rather than more passive engagement with the website and other online materials. For example, the doctor's quotation in

the introductory section shows a very positive reaction to adopting some of these ideas more broadly.

We used focus groups, which were part of the Errordiary in healthcare initiative, as a way to introduce Errordiary and the ideas behind it to our three groups. We present how we ran the workshop and its rationale in the following section.

Method: How we ran the workshop

As part of the Errordiary in healthcare initiative we developed a successful model of how to run an Errordiary Workshop, which we describe here.

Workshop Aims

The workshops aims align with Errordiary's aims which are referred to above:

1. To encourage participants to discuss errors and resilience strategies in relation to their everyday experiences and more serious cases.
2. To encourage participants to share their own errors and resilience strategies with the group.
3. To encourage participants to reflect on risks, reducing error and blame.

Workshop Equipment

Before the workshop, ten examples of error and ten examples of resilience strategies were selected from the Errordiary website (see Appendix 2 and 3). These were selected to show a range of examples from each target domain, i.e. everyday, diabetes and medical. Serious and more light-hearted examples were also included for juxtaposition. Examples were also chosen for their underlying similarities, e.g. confusing hairspray and body spray cans because they look the similar shares resemblance with an incident where a patient's brain was injected with glue instead of dye[1].

These examples were displayed consecutively on an overhead projector and participants were asked to record their reactions to these on a hand-out (see Appendix 3 for the hand-out). They were also printed on cards so they could be shared, discussed and organized amongst the group. Blank cards were used for participants to write their own errors on when the sharing and organizing section of the workshop took place.

Workshop Procedure

The workshop itself was conducted in two main sections: errors and resilience strategies.

In each, we first presented the 10 examples and asked for individual written reactions to each on a recording sheet(see Appendix 3). Participants were given a minute or two to respond to each error and resilience strategy. We asked people to reflect on these individually in the workshop as a way to get them to really think about them.

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[1] http://www.theguardian.com/society/2014/jan/27/nhs-24m-bill-glue-injected-girls-brain-great-ormond-street

Second, we invited participants to contribute an example of their own. This was written on a blank card and when everyone had produced one they were presented orally to the group, so that participants had a more personal connection to the data and examples to be discussed. These cards were then placed in the middle with the cards that contained each of the 10 examples.

Third, we asked participants to categorise the cards in the middle of the table (the 10 examples and their own examples). We left them free to decide how to categorise them, and encouraged them to try different ways (e.g. by severity, domain, and type) if they did not think of this themselves or if they asked how to categorise them. We intentionally had these examples on physical cards so that they could be physically shared and organised between the participants – this meant that errors and strategies had physical tokens so they were easier to talk about and categorise.

The discussion that followed allowed us to introduce research on categorizing human error (e.g. we referred to the slips, mistakes and violations categorisation by Reason (1990)) and resilience strategies (e.g. we referred to some of the resilience strategy categorisation developed by Furniss et al., (2012); Furniss et al., (2014)). This encouraged our non-specialist participants to think about error and resilience strategies at a more abstract level.

Results

Through discussing the examples provided and sharing their own, participants debated what was meant by error (e.g. was the process or the outcome more important) and how error can be categorised (e.g. by domain: everyday or medical; by type, like forgetfulness or confusing similar things; or by gravity of outcome: negligible to fatal). This led into discussions concerning fault and blame. There were often clashes between discourses about learning without reprisal and accountability with disciplinary action.

Regarding resilience strategies, participants found the concept to be novel, and while they had not thought about them in an abstract and formal way before, they were able to offer their own examples. In general however, they would have preferred a more intuitive label than 'resilience strategies'. One participant suggested 'error antidote' but apart from this there were few suggestions.

Perhaps the most striking result across the workshops was the amount of self-generated discussion that they helped to foster between participants on these issues.

Discussion

We believe that part of the success of these workshops is the juxtaposition between the funny and serious examples, and the more everyday and rare cases. People seem to *relate* to the everyday examples because they have done them or can imagine doing them, and people seem to *engage* because humour breaks down barriers where more serious examples could raise them and distance people. As on the Errordiary website, the workshop format was able to take advantage of this juxtaposition. The wide spectrum of examples leaves plenty of scope for discussion, particularly in relation to tensions raised between laughing at someone spraying their body with hairspray and being shocked at someone

injecting a patient's brain with glue. For some participants, linking between the trivial and the serious could be problematic, which provides further substance for debate.

Errordiary does not aim to offer concrete and absolute answers to reducing error, but to raise awareness, debate and try to empower participants to develop their own solutions. Such workshops could be run with teams to encourage discussion about errors and risks they share in their own environment, and to share resilience strategies that would be relevant and beneficial to that group's performance. The three workshops we have run have been with groups of people who did not know each other, but who have similar professional backgrounds or chronic conditions. How the group dynamics play out in teams who know each other, whilst talking about their own place of work, remains to be explored in different contexts.

This paper focuses on presenting a proof of concept and structure for what appears to be a successful format for a workshop on error and resilience strategies. Further work needs to be done to test the workshop's activities against learning outcomes. We also have more work to do on the data that was collected during these workshops. These analyses will explore the discourses within and between the different groups of patients, professionals and the public. Patterns in this data could inform people of what to expect when they facilitate similar workshops.

Acknowledgements

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Appendix 1: 10 errors used in the workshop

1

Turned up at nursery to collect son. Staff have heart attacks as he's not there! Then I remember he's at childminder's today

2

Patient skin patch overdose in hot bath. They didn't know that the slow release medication speeded up by the hot water.

3

Oops, just forgot to include the carbs in the sausages, that puts me 1u out on the calculation #diabetes

4

Surgeon operated on the wrong ankle – wrong site surgery. They were meant to operate on the right ankle but they operated on the left.

5

Simple HF: hairspray & bodyspray cans same look. Wife put hairspray on her chest!

6

I worked out the amount of insulin I needed correctly, but I injected fast acting insulin instead of slow acting insulin

7

Great Ormond Street patient receives payout after brain injected with glue. A syringe full of dye and a syringe full of glue were confused

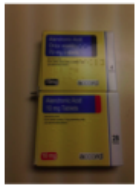
8

I forgot to inject basal insulin last night! #Bgnow 24.0, this why @timesulin useful! #SchoolBoyError

9

Peter Kay: His grandparents were whispering in kitchen whilst they taped Wizard Of Oz on TV. They thought voices would record!

10



Future #Errordiary? RT @WePharmacists: #weph RT @6Oakfield: although not as dangerous this one nearly caught me out

Appendix 2: 10 resilience strategies used in the workshop

1

I have a spare set of lancets, needles, test strips and a bg meter in my locker at work in case I run out/forget them #diabetes

2

Girlf stuck sticker on the inside of the front door to remind herself of things not to forget for work on Monday

3

Have an iPhone charger cable at home AND at work. Useful for when I (or colleagues) forget to charge at home

4

Reminds me: medics & clinicians leave sample stickers on doors of patient's rooms to recall what's needed on entering

5

My fast acting insulin is in a silver (bullet) pen (fast) & slow acting in blue pen (chilled -> slow)

6

I send all patients copies of clinic letters. About once a month patient corrects errors.

7

Wrote a note with "INSULIN IN FRIDGE" and placed it on luggage bag to ensure I didn't leave it in hotel

8

Did my regular 4 point check before leaving the house so I do not forget keys, wallet, phone and travel pass

9

If a nurse has to start two infusion pumps at the same time they will often set one pump up 1st and then the 2nd one, this reduces the likelihood of confusing the medication or values between them

10

Coloured key tags – so you don't confuse similar keys

Appendix 3: Hand-out for individual reactions to examples

A separate sheet was used for errors and resilience strategies. The main purpose of this was to get individual reactions before the group discussion, which may not be a priority if this workshop is adapted for team learning.

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	